

Application S/N 10/649,756
Amendment dated: June 30, 2005
Response to Office Action dated: April 26, 2005

CE10823N

REMARKS/ARGUMENTS

Claims 1-5, 9-30 and 33-37 are pending in the application. Claims 6-8 have been canceled without prejudice (claims 31 and 32 were previously canceled without prejudice). In addition, new claims 35-39 have been added. No new matter has been added in view of the above claim amendments. In the Office Action, claims 1-30, 33 and 34 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0134636 to Sundar, et al. (Sundar).

A brief summary of the Sundar reference may be helpful here. Sundar discloses a method, system and apparatus for a mobile station to sense and select a wireless local area network (WLAN) or a wide area mobile wireless network (WWAN). In particular, the WWAN determines when a mobile unit may enter the coverage area of a WLAN service in a building. The WWAN then signals the mobile unit to begin sensing for the WLAN. Upon successful detection of a beacon from an access point (AP) of the WLAN, the mobile unit deregisters from the WWAN and registers with a mobile switching center (MSC) serving the WLAN. As it roams through the WLAN, the mobile unit will continue to sense the RF energy strength of the WWAN. If it detects that the WLAN RF signal strength decreases below a threshold value and the WWAN strength is above a threshold value, the mobile station will initiate a registration process with the WWAN (see para. 0069).

Independent claims 1, 18, 20, 23 and 25 have been amended to clarify that the egress portal resides within a cell of a WLAN and occupies a region that is smaller than the cell of the WLAN. Support for the amendments can be found in FIG. 3 and on page 11, line 16 to page 12, line 10 (it is known that Bluetooth devices or electronic article surveillance points may occupy a region that is smaller than that of a WLAN cell).

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Sundar does not disclose, illustrate, teach or even suggest such a concept. It is clear that the mobile unit in Sundar, once it registers with the WLAN, monitors both the WLAN and WWAN RF signal strengths (see para. 0069). Because Sundar does not disclose the idea of an egress portal, the mobile unit in Sundar will continue to monitor the WWAN RF signal strength no matter where in a particular cell the mobile unit is. This feature remains true no matter in which cell the mobile unit in Sundar is located. In direct contrast, the present invention has created an area that is smaller than the cell of a WLAN, which can prevent a mobile unit from needlessly searching for or monitoring a WWAN and can improve battery life.

Independent claims 17 and 30 have been amended to clarify that the wireless local area network border cell is of the first communication system. Support for the amendment can be found in FIG. 3 and on page 11, lines 16-17. Sundar does not disclose, illustrate, teach or even suggest the invention as claimed in claims 17 and 30. In particular, the mobile unit in Sundar monitors the RF signal strength of a WLAN cell, and if the signal strength drops below a predetermined threshold, the mobile unit will register with the WWAN. During this process, the mobile unit continues to monitor the signal strength of the WWAN.

In contrast, the mobile unit of the present invention, once it detects that it is operating in a WLAN border cell of a first communication system, can register with a second communication system. Moreover, the mobile unit of the present invention can detect a second WLAN border cell. Because it can detect a second border cell, the mobile unit associated with the present invention can determine that it is moving to a coverage area of the second communication system. By doing so, the mobile unit is not required to monitor the signal strength of the second communication system until it

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detects the second WLAN border cell, a feature that saves battery power as compared to the method described in Sundar.

Independent claim 12 has been amended to clarify that the triggering event comprises detecting a WLAN border cell. As part of the claim elements, detecting the WLAN border cell can include receiving status information from a WLAN access point and determining that a border cell indicator of the status information is set. Applicants respectfully submit that Sundar at least never describes the process of determining whether a border cell indicator is set. In fact, there is absolutely no need to do so in Sundar, because the mobile unit in Sundar does not discriminate between WLAN cells. Specifically, when moving from WWAN to WLAN, the mobile unit merely registers with the first WLAN cell that it detects (see paragraphs 0059-0061). When moving from WLAN to WWAN, the mobile unit is constantly monitoring RF signals from both the WLAN and the WWAN, which does not contemplate the process of detecting particular cells, like a border cell.

New independent claim 39 has been added. This claim recites a method to improve handover behavior between a WLAN and a WAN. At an egress portal, which is located at an entry/exit point of the WLAN and is not a WLAN access point or a cell for a WAN, the following steps can be performed: a call can be conducted on a first network, which can be either the WLAN or the WAN; while conducting the call, a first signal from the egress point can be conducted; in response to detecting the first signal from the egress portal, a registration sequence with a second network can be initiated, which can be the other one of the WAN or the WLAN; after detecting the first signal from the egress portal, movement from a coverage area of the first network to a coverage area of the second network can be determined; and in response to determining this movement,

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the call can be conducted via the second network. Support for this amendment can be found in FIG. 7 and on page 15, line 18 to page 16, line 18. Applicants submit that Sundar, nor any other prior art reference, discloses these recited elements.

In view of the above, Applicants believe that independent claims 1, 12, 17, 18, 20, 23, 25, 30 and new independent claim 39 are patentable over the prior art. Applicants also believe that those claims that depend from independent claims 1, 12, 17, 18, 20, 23, 25, 30 and 39 are now patentable, in view of both their dependence from claims 1, 12, 17, 18, 20, 23, 25, 30 and 39 and their independent patentability. Applicants have also added new dependent claims 35 and 36, both of which recite that detecting the second wireless local area network border cell can be done within a predetermined amount of time.

In addition, Applicants have added new dependent claims 37 and 38, both of which recite that conducting the present or the subsequent call via the second wireless communication system can be performed in response to determining that the wireless device is moving from the coverage area of the first communications system to the coverage area of the second communications system. Applicants believe that these new dependent claims are patentable over the prior art, in view of both their dependence from their corresponding independent claims and their independent patentability. Reconsideration and withdrawal of the rejection of the claims is respectfully requested. Passing of this case is now believed to be in order, and a Notice of Allowance is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing

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the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicants' attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

The Commissioner is hereby authorized to charge any necessary fee, or credit any overpayment, to Motorola, Inc. Deposit Account No. 50-2117.

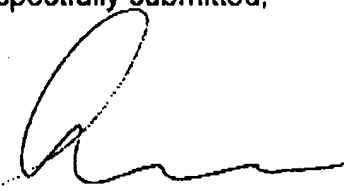
Respectfully submitted,

SEND CORRESPONDENCE TO:

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